

Math Makes Sense Page 222 - 224

6. From the list, which terms are like
- $8x$
- ?

$$-3x, 5x^2, 4, 3x, 9, -11x^2, 7x, -3$$

Explain how you know they are like terms.

7. From the list, which terms are like
- $-2n^2$
- ?

$$3n, -n^2, -2, 4n, 2n^2, -2, 3, 5n^2$$

Explain how you know they are like terms.

8. For each part, combine tiles that represent like terms.

Write the simplified polynomial.



12. Simplify each polynomial.

a) $2m + 4 - 3m - 8$

b) $4 - 5x + 6x - 2$

c) $3g - 6 - 2g + 9$

d) $-5 + 1 + h - 4h$

e) $-6n - 5n - 4 - 7$

f) $3s - 4s - 5 - 6$

13. Simplify each polynomial.

a) $6 - 3x + x^2 + 9 - x$

b) $5m - 2m^2 - m^2 + 5m$

c) $5x - x^2 + 3x + x^2 - 7$

d) $3p^2 - 2p + 4 + p^2 + 3$

e) $a^2 - 2a - 4 + 2a - a^2 + 4$

f) $-6x^2 + 17x - 4 - 3x^2 + 8 - 12x$

14. Simplify each polynomial.

a) $3x^2 + 5y - 2x^2 - 1 - y$

b) $pq - 1 - p^2 + 5p - 5pq - 2p$

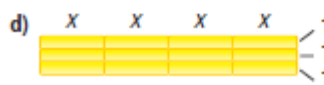
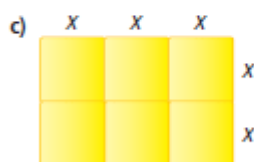
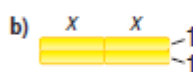
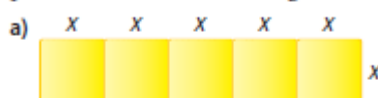
c) $5x^2 + 3xy - 2y - x^2 - 7x + 4xy$

d) $3r^2 - rs + 5s + r^2 - 2rs - 4s$

e) $4gh + 7 - 2g^2 - 3gh - 11 + 6g$

f) $-5s + st - 4s^2 - 12st + 10s - 2s^2$

19. Write a polynomial to represent the perimeter of each rectangle.



20. Each polynomial below represents the perimeter of a rectangle. Use algebra tiles to make the rectangle. Sketch the tiles. How many different rectangles can you make each time?

a) $6c + 4$

b) $4d$

c) $8 + 2m$

d) $12r$

e) $6s$

f) $4a + 10$

22. Write a polynomial for the perimeter of this shape. Simplify the polynomial.

